



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

HC

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/033,997	03/03/98	BARONE	M 112028-14

HEATHER B SHAPIRO  
CESARI AND MCKENNA  
30 ROWES WHARF  
BOSTON MA 02110

LM01/0222

EXAMINER

PATEL, R

ART UNIT	PAPER NUMBER
----------	--------------

2786

DATE MAILED:

02/22/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**09/033,997**

Applicant

**Barone et al.**

Examiner

**Ramesh Patel**

Group Art Unit  
**2786**



☒ Responsive to communication(s) filed on Mar 3, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-29 is/are pending in the applicat

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-29 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4 and 6

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 2786

---

**DETAILED ACTION**

1. Claims 1-29 are presented for examination.
2. The information disclosure statements submitted on 7/27/98 and 8/3/99 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

**Drawings**

3. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

**Claim Rejections - 35 USC § 112**

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 10, 18, 19 and 24, recites the limitations "subjecting", examiner is not sure what is subjecting means. Applicant suggested to review all the claims make appropriate corrections.

Art Unit: 2786

---

Claim 6, recites the limitations "claim 35", which is improper dependency for claim 6, because a claim should be dependent to the preceding claim(s). Also, examiner has made official notice that there are only 29 claims in the disclosure, examiner is not sure whether claim 6 is depends on claim 5 or any other preceding claim(s). Applicant suggested to review all the claims make appropriate corrections.

Dependent claims which are not rejected are rejected based on rejected based claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. Claim 9 is rejected under 35 U.S.C. 102(e) as being anticipated by Harafuji et al..

As to claim 9, Harafuji teaches that the semiconductor device is produced by plasma generating and processing as shown in figures 12(a)-13(b), 15(a) and 16(a) wherein the end product is semiconductor device as claimed (see, abstract and col. 11, lines 42-68). See, *In re Brown*, 459 F.2d 531,535, 173 USPQ, 685, 688 (CCPA 1972).

Art Unit: 2786

---

7. Claims 1-8 and 10-29 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art of the record fails to teach a method and an apparatus for determining a respective process value of at least variable governing a plasma process sequence for creating a desired surface profile on a process substrate which comprising: generating an approximate profile model from the initial surface profile model and respective test value of the at least one input variable; generating an indicator of difference between the test surface profile and the approximate profile prediction and generating a respective optimum value of the at least one unknown coefficient that minimizes the indicator of difference; modifying the initial surface profile model to include the at least one optimum value thereby providing a final model in terms of the at least one input variable and generating the respective process value of the at least one input variable from the final model and the desired surface profile.

Art Unit: 2786

---

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this or earlier communication from the examiner should be directed to Ramesh Patel at (703) 308-6673.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Grant, can be reached on (703)308-1108.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.

rp *R Patel*  
Art Unit-2786  
February 14, 2000

*Paul P. Gordon*  
PAUL P. GORDON  
PRIMARY EXAMINER